Title:
Mentor experiences of international healthcare students’ learning in a clinical environment: a systematic review

Word count:
Manuscript + Abstract + keywords (excluded references): 4 500

Authors:

Corresponding author:
Kristina Mikkonen RN, MHSc, (Doctoral Candidate)
Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu, Finland
Tel. +358 (0) 404113913
email: kristina.mikkonen@oulu.fi

Satu Elo RN, PhD (Adjunct Professor)
Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu, Finland

Anna-Maria Tuomikoski RN, MSc, (Doctoral Candidate)
Oulu University Hospital, University of Oulu, Finland

Maria Kääriäinen RN, PhD (Professor)
Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu, Finland

Acknowledgement:

We would like to acknowledge the help of information specialist Sirpa Grekula from the University of Oulu for her assistance in improving search term strategy. Additional thanks go to the Finnish Foundation of Nursing Education for funding the first author’s research, thus making it possible to conduct the review reported in this article.
Highlights

- Clinical supervision of culturally and linguistically diverse students is a growing phenomenon.
- A positive intercultural mentor’s role enhanced students’ learning experience, reduced their stress in clinical practice, and increased their empathy towards others.
- Student’s own role in learning is seen as an important aspect to succeeding in clinical practice.
- Lack of cultural competence in mentors hindered adequate supervision.
- Aspects influencing culturally and linguistically diverse healthcare students’ learning in the clinical environment are equivalent to the aspects of non-culturally and linguistically diverse healthcare students.
Abstract

Background: Globalisation brought new possibilities in international growth in education and professional mobility among the healthcare. There has been noticeable increase of international degree programmes among non-English speaking countries in Europe involving clinical learning challenges for healthcare students. Previous studies conducted on culturally and linguistically diverse healthcare students have shown that the attitudes of clinical staff had either a positive or a negative influence on the learning experiences of culturally and linguistically diverse healthcare students.

Objective

The aim of this systematic review was to describe the mentors’ experiences of culturally and linguistically diverse healthcare students’ learning in a clinical environment. The objective is to identify aspects influencing culturally and linguistically diverse healthcare students learning in the clinical environment in order to promote an optimal mentoring practice.

Design

A systematic review was conducted according to the guidelines of the Centre for Reviews and Dissemination.

Data Sources

Seven electronic databases: CINAHL, Medline Ovid, Scopus, the Web of Science, Academic Search Premiere, Eric and the Cochrane Library were used.

Review methods

Search inclusion criteria were planned in the PICOS review format by including peer reviewed articles published between 2000 and 2014, without setting any language limitations. Five peer reviewed articles remained after the screening process and a critical appraisal assessment, which was conducted by two researchers separately. The results of the original studies were analysed using a thematic synthesis.
Results
The results indicate that a positive intercultural mentor’s role enhanced reciprocal learning by improving culturally and linguistically diverse healthcare students’ learning experience and reducing of stress in the clinical environment. The student’s own active role in learning influenced their success in clinical learning experiences and helped them to develop their own skills in coping with language difficulties. Integrating culturally and linguistically diverse healthcare students into work with domestic students was seen to be important for reciprocal learning and avoidance of discrimination.

Conclusion
Many aspects influencing healthcare students’ learning were found to be equivalent to the aspects of non-culturally and linguistically diverse students and their mentoring. However, the differences were found in a positive intercultural mentors’ role carrying a great meaning of being an advocate to cultural and linguistic difference, acknowledgement of mentors’ own and students’ culture and creating a welcoming environment for the student by minimizing the feeling of social isolation.

Keywords: Clinical mentors, clinical learning, clinical environment, clinical practice, cultural and linguistic diversity, healthcare students

Highlights

- A positive intercultural mentor’s role enhanced students’ learning experience, reduced their stress in clinical practice, and increased their empathy towards others.
- Student’s own role in learning is seen as an important aspect to succeeding in clinical practice.
- Lack of cultural competence in mentors hindered adequate supervision.
- Aspects influencing culturally and linguistically diverse healthcare students’ learning in the clinical environment are equivalent to the aspects of non-culturally and linguistically diverse healthcare students.
Introduction

Globalisation has enhanced international growth and cooperation among international higher education institutions (Allen and Ogilvie, 2004; Herdman, 2004), with a noticeable increase in the number of international degree programmes and professional mobility in healthcare also among non-English speaking countries in Europe (Glinos, 2015). According to the statistical data of universities of applied sciences in Finland, the number of international students has doubled between 2005 and 2014, for example. (Ministry of Education and Culture, 2014).

Universities educating healthcare professionals include clinical education in which clinical practice (77/452/EEC; 89/595/EEC) involving clinical staff mentoring students can account for up to 50% of instruction. The clinical education of culturally and linguistically diverse healthcare students in clinical environment was reported to have experienced difficulties with healthcare staff mentors who did not know how to relate to students and have further build negative attitudes towards students (Pitkäjärvi et al., 2012), which impacted on students’ learning in a negative way (Mattila et al., 2010; Miguel and Rogan, 2009; Sedgwick et al., 2014; Pitkäjärvi et al., 2012). The systematic review of the literature on culturally and linguistically diverse healthcare students’ experiences of learning in a clinical environment identified mentorship aspects which included creation of a positive learning environment, motivation of students to be actively involved in their learning, or obstruction of learning experiences with resultant feelings of frustration, humiliation and ethnic discrimination (Mikkonen et al., 2015a).

The characteristics of effective clinical mentorship defined by non-culturally and linguistically diverse healthcare students were knowledge and clinical judgment, interpersonal relationship, evaluation, teaching ability, nursing competence and personal traits (Elcigil and Sari, 2008; Woodley, 2013) in a welcoming environment (Myall et al., 2008). The mentor’s role included the
components of assisting, befriending, guiding, advising and counselling (Chow and Suen, 2001). An interpersonal relationship created a sense of belonging and gave students a positive learning experience (Levett-Jones et al., 2009). Mentors themselves described their role as someone who could give feedback, share available time, have a positive attitude and patience, be enthusiastic and share their own experience in nursing (Huybrecht et al., 2011). However, the definitions of mentorship presented in the literature did not use the context of cultural and linguistic diversity in healthcare students’ mentorship.

The knowledge and guidance on a good practice of clinical mentoring designed for culturally and linguistically diverse students was shown to be lacking in the healthcare education. The studies involving cultural and linguistic diversity of healthcare students were found to be mainly limited to qualitative research approaches, without stronger empirical methods used to find important concepts describing aspects influencing students’ learning in clinical environment. (Mikkonen et al. 2015a.)

The aim of this systematic review was to describe mentors’ experiences of culturally and linguistically diverse healthcare students’ learning in a clinical environment. The objective is to identify aspects influencing culturally and linguistically diverse healthcare students’ learning in the clinical environment in order to promote an optimal mentoring practice.

The concepts in the review included mentors of culturally and linguistically diverse healthcare students. Culturally and linguistically diverse healthcare students may also be taken to mean international healthcare students. The mentors included clinical staff working in clinical hospital settings and clinical facilitators actively involved in students’ clinical education, also seen as intermediators between academic and clinical settings (Lambert and Glacken, 2005). Additionally, the review remained focused on clinical education in clinical hospital settings. Healthcare education
included mentorship of nursing, midwifery and physiotherapy students. The research question for the review was:

- What kind of experiences have mentors had of culturally and linguistically diverse healthcare students’ learning in a clinical environment?

**Methods**

**Search strategy**
The systematic review was conducted according to the guidelines of the Centre for Review and Dissemination for undertaking a review in healthcare (CRD, 2009). The systematic review was conducted following the systematic review by Mikkonen et al. (2015a), which examined culturally and linguistically diverse healthcare students’ experiences of learning in a clinical environment. The experiences of mentors with culturally and linguistically diverse healthcare students were seen as important in order to gain a greater understanding of aspects influencing students’ learning in a clinical environment after obstructed student learning experiences relating to mentorship have occurred (Mikkonen et al., 2015a).

Inclusion criteria were chosen according to the research question in the PICOS review form by dividing criteria into participants, phenomena of interest, context and types of studies (CRD, 2009; JBI, 2014; Stern and McArthur, 2014). The inclusion criteria were chosen to determine the eligibility of studies (Aromataris and Pearson, 2014). The participants were mentors of culturally and linguistically diverse undergraduate healthcare students, including nursing, midwifery and physiotherapy students. Phenomena of interest included mentors’ experiences of culturally and linguistically diverse healthcare students’ learning in a clinical environment. The context was a clinical environment, which provided the setting for clinical learning in clinical practice/placements/rotation/training. The types of studies chosen for the review were original, qualitative, peer-reviewed studies published between 2000 and 2014, without any language limitations being
set. Peer-reviewed studies were limited to qualitative studies, as a search of the literature did not identify any quantitative peer-reviewed studies.

The search terms were differentiated in four specific keyword groups, including their possible synonyms, which were combined together in the search strategy (Aromataris and Riitano, 2014). The search strategy was conducted with the help of an information skill specialist. The first search keywords were (mentor*) OR (teach*) OR (facilitator) OR (tutor*) OR (educator) OR (instructor) OR (supervisor) OR (preceptor) OR (coach) OR (trainer). The second group was (students, nursing) OR (students, midwifery) OR (students, physical therapy). The third search keywords were (cultural diversity) OR (language diversity) OR (English as a second language) OR (students, foreign). The fourth and final group was (learning environment, clinical) OR (education, clinical) OR ("clinical practice" or "clinical placement*" or "clinical rotation") and (educat* or teach*). Seven electronic databases were used to search for original studies. A total 127 of original studies were found in the search of CINAHL (EBSCO) (n=21), Medline Ovid (n=5), Scopus (n=34), the Web of Science (ISI) (n=21), Academic Search Premiere (EBSCO) (n=8), Eric (ProQuest) (n=38), the Cochrane Library (n=0). After removing duplications, 106 original studies remained.

**Study selection and critical appraisal**
The study selection and critical appraisal stage was conducted by two researchers separately and agreed on at the end. There was no disagreement between the two researchers during the process of study selection and data extraction. The original studies were screened by title (n=106), abstract (n=35), and full text (n=10), finally leaving five (n=5) original studies for the review. The references of the five original studies were searched manually, additionally finding one original study. (Figure 1). All of the original studies (n=6) were further examined by the Qualitative Assessment Research Instrument (QARI) of critical appraisal, including ten assessment criteria
Each study needed to have more than five criteria scored in order to be included in the review synthesis. Lower quality studies were excluded in order to avoid possible biases and errors in the systematic review (Aromataris and Pearson, 2014; Averis and Pearson, 2003; Porritt et al., 2014). One of the original studies (Lu and Maithus, 2012) received only three scores in QARI criteria and was excluded from the review. (Table 1). Finally, five original studies were included for data synthesis. The methodological quality of the systematic review was examined and improved by using a measurement tool (AMSTAR) “to assess the methodological quality of systematic review” by scoring full points (n=11) in the assessment criteria (Shea et al., 2007).

Data extraction and synthesis
Thematic synthesis was chosen for data analysis and interpretation of results (Thomas and Harden, 2008). The philosophy of the thematic synthesis method is grounded in the belief that knowledge of reality lies in participants’ perspectives and experiences (Tong et al., 2012), which corresponded to the purpose of the review. Additionally, the thematic synthesis method was considered to be the most effective in answering the review question, which is an essential part of the systematic review process (Aromataris and Pearson, 2014). No specific software was used in conducting the thematic synthesis. The three stages of thematic synthesis were conducted firstly by collecting all ‘Findings’/‘Results’ of each original study and performing line by line coding (n= 105), secondly by collecting codes in descriptive themes (n= 27) linking to relevant topics, and thirdly by creating analytical themes (n= 5). (Table 2). Additionally, the parts ‘Abstract’, ‘Discussion’ and ‘Conclusion’ of original studies were reviewed in order to examine whether or not additional meanings had been presented in the ‘Findings’/‘Results’ in order to avoid missing relevant data (Thomas and Harden, 2008). The research question was employed as a guideline in choosing the codes for the thematic synthesis.
Line by line coding included creating codes, while keeping the meaning as close to the original text as possible. The creation of descriptive themes helped the researcher to group the codes into a classified structure of meanings. The meanings were kept close to the original findings in the studies chosen for the review. Eventually, the analytical themes chosen in the synthesis provided an interpretation which took us a step further towards understanding the meanings of mentor experiences of culturally and linguistically diverse students in clinical learning. (Thomas and Harden, 2008). The thematic synthesis was conducted by one researcher.

**Results**

The five original studies were conducted in Australia (Jeong et al., 2011; San Miguel and Rogan, 2012) and Finland (Koskinen and Tossavainen, 2003a; Koskinen and Tossavainen, 2003b; Pitkäjärvi et al., 2011). The authors of the studies used a variety of qualitative methodological approaches including explorative, ethnographic and inductive with methods of data collection including focus groups, observations, diary notes, group interviews, individual interviews and documentation. The mentors (n=65) included in the review mentored students of African and Asian origin, from Botswana, China, the Philippines and the United Kingdom. (Table 1).

The mentors’ experiences of culturally and linguistically diverse healthcare students’ learning were described in five analytical themes: a positive intercultural mentor’s role enhanced reciprocal learning and improved students’ learning experiences; encounters of lack of knowledge, lack of skills and time in mentorship culturally and linguistically diverse healthcare students decreased their learning opportunities and indicated a need for additional support for mentors; student’s own role in learning influenced clinical learning experiences in clinical environment; students’ language competence was regarded as important in order for students to succeed and gain a positive
experience in clinical environment; and students’ integration in work with domestic students was seen as important for reciprocal learning and avoidance of discrimination. (Table 3).

**The Positive Intercultural Mentor’s Role**

The positive intercultural mentor’s role enhanced reciprocal learning and improved culturally and linguistically diverse students’ learning experiences and intercultural teaching experiences. A positive attitude in clinical staff toward mentoring culturally and linguistically diverse students helped to provide reciprocal learning experiences despite challenges faced in teaching (Jeong et al., 2011; Koskinen and Tossavainen, 2003b; Pitkäjärvi et al., 2011). The mentors felt that they took the role of intercultural mediators, which supported students and reduced their stress by providing them with positive learning experiences (Jeong et al., 2011; Koskinen and Tossavainen, 2003a). “I think that students come to Finland…to study a particular nursing area…but in order to understand it, they should gain a slightly broader understanding of our society…I think that they don’t learn much about it…At least I myself have not encouraged this kind of broader learning…I have wondered about the role of the tutor…if she is a clinical facilitator or a cultural educator…” (Koskinen and Tossavainen, 2003a, p. 505).

Mentors thought that the time taken for reflecting on students’ clinical learning experience was important, so that there was an opportunity to talk and discuss intercultural differences (Koskinen and Tossavainen, 2003a). Mentors also noticed that intercultural sensitivity increased empathy towards others (Koskinen and Tossavainen, 2003a). “It was something in the atmosphere”, they said. Intercultural sensitivity was also reflected in students’ increased empathy; they began to speak about what it was like to be different, and how emotions could influence their future nurse–patient relationships” (Koskinen and Tossavainen, 2003a, p. 505).
The Encounter of Lack of Knowledge, Skills and Time in Mentorship

Encounters of lack of knowledge, skills and time in mentorship decreased students’ learning opportunities and indicated a need for additional support for mentors. Extra support for staff was regarded as necessary in order to keep mentors motivated to teach culturally and linguistically diverse students (Koskinen and Tossavainen, 2003b; Pitkäjärvi et al., 2011). The need for designated and specialised mentors was emphasised in order to support culturally and linguistically diverse students in stressful placements and to improve students’ learning experiences (Jeong et al., 2011; Koskinen and Tossavainen, 2003b). Time pressure was perceived as a fundamental problem in teaching culturally and linguistically diverse students (Jeong et al., 2011), with additional problems seen in inconsistent and inexperienced mentors (Jeong et al., 2011; Pitkäjärvi et al., 2011).

“So even just those practicalities of (administering medications), explaining it in a group before you get down to doing what you are supposed to do before that, can take up a lot of time. So just the communication of how things are done here in Australia can actually take a lot of time, and, I find it really important that you have to do that” (Jeong et al., 2011, p 242).

Other difficulties expressed were a lack of knowledge and teaching skills when mentoring culturally and linguistically diverse students (Jeong et al., 2011, Pitkäjärvi et al., 2011). Teaching in a foreign language was perceived by mentors as an exhausting, stressful and demanding experience (Koskinen and Tossavainen, 2003b; Pitkäjärvi et al., 2011). “…it was an eight-week practice, and everything went real well, and the tutor nurse interpreted and helped, and when the student left the room (used for the assessment session) she simply collapsed and said she couldn’t have continued a day longer…” (Pitkäjärvi et al., 2011, p. 556). “An eight-hour day and the British student is there for eight hours. You get tired because you have to translate everything into English. . . . They even prefer to sit with you at the coffee table. . . you don’t have a moment to yourself during the day. . . you just have to be sharp all the time.” (Koskinen and Tossavainen, 2003b, p. 281).
Furthermore, the intercultural differences were seen as a challenge in mentors’ and students’ relationships (Koskinen and Tossavainen, 2003a; Koskinen and Tossavainen, 2003b). Mentors also expressed concern about inadequate university support and lack of information provided for the clinical mentorship of culturally and linguistically diverse students, which caused frustration among clinical staff (Jeong et al., 2011; Koskinen and Tossavainen, 2003b). “It would be helpful for staff to have more knowledge about the cultures of students coming to our universities” (Jeong et al., 2011, p.242)

**The Student’s own Role in Learning**

The student’s own role in learning was seen as an important influence upon the nature of clinical learning experiences in clinical environment. Students learned more successfully when they took the initiative and were motivated, self-directed, extrovert, assertive, proactive, engaged in their own learning, responsible, happy, enthusiastic, caring, empathetic and outgoing (Koskinen and Tossavainen, 2003a; Koskinen and Tossavainen, 2003b; San Miguel and Rogan, 2012). Clinical mentors shared that they had difficulties in supporting students who were less vocal and did not show motivation, willingness to learn, interest and assertiveness in learning (Koskinen and Tossavainen, 2003a, San Miguel and Rogan, 2012). Clinical staff felt helpless if students did not commit to clinical schedules and routines (Koskinen and Tossavainen, 2003b). “My experiences range from one extreme to another. . . there are students that we don’t even see on the ward. Then there are students who have more or less their own timetable . . . . . . and then there are students who are there regularly. . . . we have discussed this problem and continue to consider the options. . . . . . . good advice and hints are welcome” (Koskinen and Tossavainen, 2003b, p. 281). Mentors also described students’ willingness to learn in terms of students seeking learning opportunities, showing interest in learning, and accepting feedback and constructive criticism from mentors (Koskinen and Tossavainen, 2003b; San Miguel and Rogan, 2012). Mentors further noticed that students who took
the initiative developed their own skills in coping with language difficulties (Koskinen and Tossavainen, 2003a; Koskinen and Tossavainen, 2003b).

**The Language Competence of Students**
The language competence of students was regarded as important in order for culturally and linguistically diverse students to succeed and gain positive experience in clinical environment. The mentors expressed that language competence and sufficient communication skills were important in order for students to engage with patients and staff, and to have skills in documentation (Jeong et al., 2011; San Miguel and Rogan, 2012). Lack of verbal and written language proficiency caused difficulties for students or even failure in the clinical practice component of their studies (Jeong et al., 2011; Pitkäjärvi et al., 2011; San Miguel and Rogan, 2012). Clinical staff shared: “They come with an English language barrier or a disadvantage and I guess that’s not fair. They (university) are setting them up to fail” (Jeong et al., 2011, p.241). Furthermore, language barriers isolated students and rendered their performance in clinical practice unreliable (Pitkäjärvi et al., 2011). Language proficiency, on the other hand, improved the relationship between students and mentors (Koskinen and Tossavainen, 2003a). Additionally, the mentors noticed that the students’ non-verbal communication skills improved with time in the clinical environment (Koskinen and Tossavainen, 2003a).

**The Integration of Culturally and Linguistically Diverse Students with Domestic Students in Clinical Environment**
The integration of culturally and linguistically diverse students in work with domestic students was seen to be important for reciprocal learning and avoidance of discrimination. Mentors expressed concern about culturally and linguistically diverse students’ social isolation in their learning experiences (Jeong et al., 2011). “Some of the [international] students you talk to say ‘I live on university campus and I go to my room, I come to my class, I go to the library, I go to my room’, and how can they [international students] emotionally survive that…” (Jeong et al., 2011, p.241).
The social isolation was explained in terms of rejection and cultural discrimination by domestic students, which was visible in unwillingness to work in groups with culturally and linguistically diverse students, bullying, being rude and inappropriate with comments during reflection times (Jeong et al., 2011). “They said, I don’t want to work with an international student because I can’t talk to them and they can’t talk to me and that’s going to reduce my marks, so I don’t want to be put in that situation.” (Jeong et al., 2011, p. 241). “Basically bullying…by other students, especially in a debriefing session…in [clinical] placement where one of the international students has not been able to communicate what they want effectively and other students have [said] ‘spit it out, spit it out’ and it has been quite rude and inappropriate.” Jeong et al., 2011, p. 241).

Mentors emphasised that the lack of integration of culturally and linguistically diverse students with domestic students brought disadvantages for culturally and linguistically diverse students and their learning (Jeong et al., 2011). Mentors thought that sharing international experiences between culturally and linguistically diverse and domestic students could broaden the global perspective of the two student groups (Jeong et al., 2011) and help culturally and linguistically diverse students to build their social network (Koskinen and Tossavainen, 2003a). “As one commented: They have entered a totally different culture…and we have noticed that their contacts with Finnish students are infrequent…I wonder about the extent to which the tutor should show concern and support the student in overcoming these anxieties and culture shocks and so on…and what should be done. Should I go and get the student from there (student village), to discuss with her…or what?” (Koskinen and Tossavainen, 2003a, p. 504).

**Discussion**

The findings indicate that many of aspects influencing culturally and linguistically diverse healthcare students learning in the clinical environment are equivalent to the aspects found of non-
culturally and linguistically diverse healthcare students. The importance of effective clinical mentoring in the clinical environment is seen in a practical skill development, the integration of a theory into practice and development of clinical judgement in a patient care (Hall-Lord et al. 2013; Woodley 2013). The role of a mentor in students’ clinical education in a healthcare has a great influence upon students’ clinical experience and professional development (Ferrara 2012; Jokelainen et al., 2011; Madhavanpraphakaran et al., 2013; McIntosh’s et al., 2014; Mikkonen et al. 2015a; Omansky, 2010). Mentors’ competence in students’ mentoring include the elements of having knowledge of mentoring practices, possessing the characteristics and roles of the mentor, involving of motivation in mentoring, supporting student learning, having skills in teaching and using of pedagogical approaches, and implementing student-centered feedback, discussions and evaluation (Elcigil and Sari, 2008; Karjalainen et al. 2015).

Additional knowledge found in the results of the review was the intercultural role of mentors and cultural and linguistic attributes causing need of additional knowledge and skills to enhance the optimal learning opportunities of international students. The mentors’ role was explained in terms of a positive intercultural mentorship in the review, with an enhancement of reciprocal learning, reducing of students’ stress with an improvement of their learning experiences and increasing of empathy towards others (Jeong et al., 2011; Koskinen and Tossavainen, 2003a; Koskinen and Tossavainen, 2003b; Pitkäjärvi et al., 2011). The intercultural mentor’s role involves a positive attitude towards cultural differences (Jeong et al., 2011; Koskinen and Tossavainen, 2003b; Mikkonen et al., 2015a; Pitkäjärvi et al., 2011), additional knowledge and acknowledgment of own and others culture (Adeniran and Smith-Glasgow, 2010; Papadopoulos et al., 1998; Taylor et al., 2011); welcoming, friendly, patient and understanding environment; creating of sense of belonging in professional team; support of independent work and professional skills growth (Mikkonen et al.,
Previously the empathetic mentors’ behaviour was shown to influence international nursing students’ emotional wellbeing and professional development in nursing (Mikkonen et al., 2015b).

The adaptation of a new clinical environment for international students involve additional stress involving also adopting of cultural diversity and language differences (Ariel, 2013; Mikkonen et al. 2015a; Rogan et al., 2006) with developing feelings of being minority (Jeong et al., 2011; Mattila et al., 2010; Sedgwick et al., 2014). Previously, students also acknowledged seeing disadvantages and limitation in their learning possibilities because of their cultural background and lack of language skills to communicate in the clinical environment (Mikkonen et al. 2015a). The positive intercultural mentor’s role may reduce students’ discomforts of being different from others and open additional opportunities to learning than observation (Green et al., 2008; Mikkonen et al., 2015a).

Furthermore, the encounter of cultural and linguistic attributes in the clinical environment has shown to bring positive reciprocal learning experiences or negative experiences with cause of frustration, social isolation and powerlessness (Jeong et al., 2011; Koskinen and Tossavainen, 2003b; Pitkäjärvi et al., 2011). Several cultural conceptual frameworks have been introduced in a healthcare education (Thompson 2012; Thompson 2013), which provides additional guidance and may be integrated into mentoring of clinical practice. The Hand Model: Cultural Safety in Nursing is in Your Hands (Mackay et al., 2012) introduces the major concepts of cultural awareness, cultural connections, communication, negotiation and advocacy (Thompson 2012; Thompson 2013). The emphasis is on helping clinical mentors to connect with students’ culture and understand their perception of learning and living based on their cultural experiences as well as providing culturally safe environment for the clients (Mackay et al., 2012; Thompson 2012; Thompson 2013).
Eventually the encounter of linguistic diversity in mentoring international students in clinical environment influenced student-mentor relationship by creating positive experiences (Koskinen and Tossavainen, 2003a) or social isolation, limitations in learning and clinical practice failure (Jeong et al., 2011; Pitkäjärvi et al., 2011; San Miguel and Rogan, 2012). Language competence and sufficient communication skills are important aspects to succeed in students’ learning outcomes and to gain positive experience in clinical learning environment. Prior education in language and cultural communication increased culturally and linguistically diverse students’ preparation for their first clinical practice, made them more confident, gave knowledge of expectations of their performance and increased success in their experiences in the clinical practice (Rogan and San Miguel, 2013). Additional language frameworks have been developed to assess students’ language proficiency during clinical practice, which were shown to be effective guideline for nurses with the weaker students in the language proficiency (San Miguel and Rogan, 2015).

This review indicates that when mentoring culturally and linguistically diverse students there is a need for additional support in the form of education and extra peer support among clinical staff, as well as for consistency and experience (Jeong et al, 2011; Koskinen and Tossavainen, 2003b; Pitkäjärvi et al, 2011). This could help reduce the mentors’ workload and commitment pressures. Consistent and well-organised cooperation between clinical mentors and clinical facilitators could further enhance the experiences of teaching culturally and linguistically diverse students in clinical practice.

**Limitations**
The three stages of the thematic synthesis were conducted by a single researcher. The involvement of two researchers in the stages of synthesis would have strengthened the trustworthiness of the results (Thomas and Harden, 2008). However, the synthesis was strengthened by returning to the
data, reading and confirming the codes and themes several times in order to make sure that no important meanings were lost in the interpretation.

**Implications**
The results of the systematic review indicate that additional focus should be placed on researching mentorship factors influencing the mentoring of culturally and linguistically diverse healthcare students. A limited number of studies were found in the systematic review, which points to a lack of analytical studies focusing on this research area (Robertson-Malt, 2014).

Furthermore, healthcare staff actively involved in culturally and linguistically diverse students’ mentoring require supplementary education and preparation for mentorship. A well-designed, structured and supportive orientation into clinical practice for culturally and linguistically diverse students may help student with their integration process into a new cultural and clinical environment. Additional time and support is needed for the students especially in the beginning of a clinical practice. The creation of a permissive atmosphere and support for students in their own learning by providing time for reflection on their experiences with culture and clinical learning can support student’s learning process. Versatile clinical opportunities should be provided to the student by additionally allowing student to participate in team work and finding professional role in their clinical environment. The support of visual methods and guidelines may help student to reach better understanding in their learning. (Mikkonen et al., 2015a; O’Reilly and Milner, 2015.)

Despite the student’s own role in influencing the result of learning in a clinical environment, provision of additional support to culturally and linguistically diverse healthcare students and their mentors should be emphasised. Students’ language competence had considerable influence on the outcomes of their clinical practice. Additional education on language and culture should be further
considered in the curriculum for their professional education. Eventually, integration programmes for culturally and linguistically diverse and domestic students should be taken into consideration in order to minimise additional stress of discrimination and social isolation.

References


Centre for Reviews and Dissemination (CRD), 2009. Systematic Reviews: CRD’s Guidance for Undertaking Reviews in Health care. Published by CRD, University of York.


degree programs within health care sector of Finnish polytechnics. Nurse Education
Today 31(6), 553–557.

Finland: some experiences. International Journal of Nursing Education Scholarship
9(1), 1-18.

Journal of Nursing 114(6), 47-52.

114(8), 49-54.

Rogan, F., San Miguel, C., Brown, D., Kilstoff, K., 2006. ‘You find yourself’ perceptions of
nursing students from non-English speaking back-grounds of the effect of an intensive
language support program on their oral clinical communication skills. Contemporary
Nurse 23(1), 72–86.

Rogan, F., San Miguel, C., 2013. Improving clinical communication of students with English as a
second language (ESL) using online technology: a small scale evaluation study. Nurse
Education in Practice 13(5), 400–406.


San Miguel, C., Rogan, F., 2015. Assessing students’ English language proficiency during clinical
35, 771-776.

Sedgwick, M., Oosterbroek, T., Ponoma, V., 2014. “It All Depends”: how minority nursing
students experience belonging during clinical experiences. Nursing Education Perspectives 35 (2), 89-93.


Thomas, J., Harden, A., 2008. Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Medical Research Methodology 8(45), 1-10.


Tong, A., Flemming, K., McInnes, E., Oliver, S., Craig, J., 2012. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. BMC Medical Research Methodology 12,181.

<table>
<thead>
<tr>
<th>Studies chosen for review</th>
<th>Aims</th>
<th>Participants</th>
<th>Methods</th>
<th>Main findings</th>
<th>Critical appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeong et al., (2011), Australia</td>
<td>To explore the factors that impede or enhance the learning experiences of CALD students at university and in clinical settings; to explore the factors that impede or enhance the teaching experiences of academic and clinical staff with CALD students at university and in clinical settings; to identify support structures/systems for CALD students and staff.</td>
<td>3 clinical facilitators, and 4 academic staff working with culturally and linguistically diverse nursing students</td>
<td>Explorative approach Four focus group interviews Thematic analysis</td>
<td>The factors that impede or enhance the learning experiences of CALD students were English language competence, feelings of isolation, limited opportunities for learning, and inadequate university support. Feelings of isolation were explained as social isolation, feelings of rejection and discrimination. The time issue was discussed as limited opportunity for learning. The reasons for inadequate university support were explained in terms of knowledge in mentoring multicultural students and lack of cultural knowledge in domestic and CALD students.</td>
<td>10 QARI</td>
</tr>
<tr>
<td>Koskinen and Tossavainen, (2003a), Finland</td>
<td>To describe tutor–student relationships between Finnish nurse teachers and British exchange students from the tutors’ perspective.</td>
<td>7 nurse teachers, who had been designated as personal tutors for the British students</td>
<td>Ethnographic approach Tutorial session observations, research diary notes, group interviews and background questionnaires Ethnographic data analyses using Spradley’s</td>
<td>Aspects of the tutor-student relationship included a pastoral aspect, which consisted of the tutors’ willingness to care about the student, and a clinical aspect, which consisted of the tutors’ willingness to help the student to learn. It also included experiences of culture shock, which was explained in terms of intercultural differences and the language barrier.</td>
<td>8 QARI</td>
</tr>
<tr>
<td>Study</td>
<td>Aim</td>
<td>Methods</td>
<td>Data Analysis</td>
<td>Findings</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
<td>---------</td>
<td>--------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Koskinen and Tossavainen, (2003b), Finland</td>
<td>To describe the characteristics of intercultural mentorship between Finnish mentors and British students.</td>
<td>23 mentors supervising culturally and linguistically diverse nursing students</td>
<td>Ethnographic approach</td>
<td>Mentors have expressed a need to have more knowledge about students’ background, learning requirements, rules of absence and intercultural education in general. Additionally, mentors showed concern about the students’ adjustment and their learning outcomes.</td>
<td></td>
</tr>
<tr>
<td>Lu and Maithus, (2012), New Zealand</td>
<td>To look at the perceptions of nursing students with English as an additional language (EAL) from the point of view of tutors on students’ spoken language skills in clinical practice.</td>
<td>4 clinical tutors working with EAL nursing students</td>
<td>Inductive approach</td>
<td>Integrating the student into nursing work included tutors’ knowledge of their role, negative experience with lack of time by staff and other challenges seen in clinical practice. The clinical tutors identified communication as a goal, which was further explained as including students taking initiative to talk, nursing skills management and language skills management.</td>
<td></td>
</tr>
<tr>
<td>Pitkäjärvi et al., (2011), Finland</td>
<td>The purpose of this study was to research teachers’ experiences of English-Language-Taught Degree Programmes in the healthcare sector of Finnish polytechnics. More specifically, the</td>
<td>18 ELTDP teachers in six polytechnics</td>
<td>Inductive approach</td>
<td>The teachers’ experiences of clinical practice with English Language Taught Degree programme students included finding placements, students facing a negative or a positive attitude towards them at the placement, and characteristics of clinical supervision. Staff attitudes played an important role in ELTDP students’ experiences in clinical learning.</td>
<td></td>
</tr>
</tbody>
</table>
The focus was on the teachers’ experiences of teaching methods and clinical practice.

| San Miguel and Rogan, (2012), Australia | To discuss the expectations which facilitators have when assessing English-Second Language (ESL) students’ clinical communication abilities. | Clinical facilitators’ experiences with 10 ESL nursing students | Descriptive interpretive approach | Documentation | The clinical facilitators defined two groups of students, ‘good’ students who were a ‘pleasure to work with’ and students who required improvement. This was indicated with reference to the management of communication, the bedside manner and certain learning styles. | 6 QARI |
Table 2 An example of line by line coding in thematic synthesis

<table>
<thead>
<tr>
<th>Text from original study chosen for the review</th>
<th>Line by line coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“They discussed their concerns and also queried how these students were allowed to commence the nursing program when their English Language skills seemed to put them at risk of failing their courses: The key issue is that students start the program with insufficient English. They start with insufficient ability to speak [English], to comprehend and to write [English]. … because again it comes down to the language issue, when I say language I mean the written and verbal. It comes down to the language issue and language difficulties.”</td>
<td>Concerns by mentors about students poor English language skills</td>
</tr>
<tr>
<td></td>
<td>Language difficulties causing students to fail their studies</td>
</tr>
<tr>
<td></td>
<td>Insufficient language skills to speak, comprehend and write</td>
</tr>
<tr>
<td></td>
<td>Insufficient written and verbal language skills causing problems for students’ studies</td>
</tr>
</tbody>
</table>

(Jeong et al. 2011, p.241)
Table 3 Thematic synthesis of mentors’ experiences of culturally and linguistically diverse healthcare students’ learning in a clinical environment

<table>
<thead>
<tr>
<th>Analytical themes (n=5)</th>
<th>Descriptive themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A positive intercultural mentor’s role enhanced reciprocal learning and improved students’ learning experiences</td>
<td>Positive clinical staff attitude resulted in reciprocal learning experiences</td>
</tr>
<tr>
<td></td>
<td>Supervisors’ role as intercultural mediators supported students and reduced their stress by impacting positive learning experience</td>
</tr>
<tr>
<td></td>
<td>Reflecting time was seen as an important opportunity to talk about intercultural differences</td>
</tr>
<tr>
<td></td>
<td>Intercultural sensitivity increased empathy towards others</td>
</tr>
<tr>
<td>Encounters of lack of knowledge, lack of skills and time in mentorship culturally and linguistically diverse healthcare students decreased their learning opportunities and indicated a need for additional support for mentors</td>
<td>The need of extra support for staff from their colleagues to keep motivation to teach students</td>
</tr>
<tr>
<td></td>
<td>The need of designated and specialised mentors to support students in stressful placements and improve students’ learning experience</td>
</tr>
<tr>
<td></td>
<td>Time pressure perceived as a fundamental problem in teaching students</td>
</tr>
<tr>
<td></td>
<td>Problems seen in inconsistent and inexperienced mentors</td>
</tr>
<tr>
<td></td>
<td>Lack of knowledge and teaching skills in supervising students</td>
</tr>
<tr>
<td></td>
<td>Teaching in a foreign language perceived as an exhausting, stressful and demanding experience</td>
</tr>
<tr>
<td></td>
<td>Challenge of intercultural differences in relationship between mentors and students</td>
</tr>
<tr>
<td></td>
<td>Students’ learning opportunities limited to observation</td>
</tr>
<tr>
<td></td>
<td>Frustration caused by inadequate university support and information</td>
</tr>
<tr>
<td>Student’s own role in learning</td>
<td>Success in learning with motivated and self-directed students</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>clinical learning experiences in clinical environment</td>
<td>Difficulties in supporting less motivated and assertive students</td>
</tr>
<tr>
<td></td>
<td>Feelings of helplessness by mentors with non-committed students</td>
</tr>
<tr>
<td></td>
<td>Willingness to learn defined by mentors as seeking learning opportunities, showing interest in learning, accepting feedback and constructive criticism from mentors</td>
</tr>
<tr>
<td></td>
<td>Coping skills for language difficulties by proactive students</td>
</tr>
<tr>
<td>Students’ language competence was seen as important for students to succeed and for gaining a positive experience in clinical environment</td>
<td>Language competence seen as important for engaging with patients and staff, and in performing documentation</td>
</tr>
<tr>
<td></td>
<td>Lack of verbal and written language proficiency results in students’ clinical practice failure</td>
</tr>
<tr>
<td></td>
<td>Language proficiency improved student-mentor relationships</td>
</tr>
<tr>
<td></td>
<td>Non-verbal communication improved</td>
</tr>
<tr>
<td></td>
<td>Students’ social isolation and unreliable performance caused by language barriers</td>
</tr>
<tr>
<td>Students’ integration in work with domestic students was seen as important for reciprocal learning and avoiding discrimination</td>
<td>Mentors concerned by students’ social isolation in their learning experiences</td>
</tr>
<tr>
<td></td>
<td>Rejection and cultural discrimination by domestic students</td>
</tr>
<tr>
<td></td>
<td>Lack of integration of culturally and linguistically diverse students with domestic students</td>
</tr>
<tr>
<td></td>
<td>Importance of sharing international experiences among culturally and linguistically diverse and domestic students</td>
</tr>
</tbody>
</table>
Figure 1 Flow chart of study selection process according CRD (2009) guidelines

- Titles and abstracts identified and screened
  N = 127
  Duplicate publication excluded (N = 21)
  - Titles identified and screened
    N = 106
    - Abstracts identified and screened
      N = 35
      Studies excluded (N = 71)
        Participants (n= 45):
        - Not mentors of culturally and linguistically diverse students (n=10)
        - No cultural and linguistic diversity included (n=32)
        - Not mentors of nursing, midwifery and/or physiotherapy students (n=3)
        Phenomena of interest (n= 17):
        - Cultural competency in nursing education (n=5)
        - Experiences of students (n= 9)
        - Experiences of CALD nurses (n=3)
        Context (n= 8):
        - Not about clinical learning environment (n=8)
        Type of study (n= 1):
        - Literature review (n= 1)
  - Full copies retrieved and assessed for eligibility
    N = 10
    Studies excluded (N = 25)
      Phenomena of interest (n= 22):
      - Cultural competency in nursing education (n=3)
      - Experiences of students (n=18)
      - Experiences of nurses with patients (n=1)
      Context (n= 3):
      - Not about clinical learning environment (n= 3)
  - Manual search result
    N = 1
  - Number of studies before critical appraisal
    N = 6
    Studies excluded (N = 1)
      Critical appraisal:
      - Low quality ≤ 5 (n=1)
  - Number of studies included for the review
    N = 5

- Manual search result
  N = 1
  - Duplicate publication excluded (N = 21)
  - Titles identified and screened
    N = 106
    - Abstracts identified and screened
      N = 35
      - Full copies retrieved and assessed for eligibility
        N = 10
          Studies excluded (N = 25)
            Phenomena of interest (n= 22):
            - Cultural competency in nursing education (n=3)
            - Experiences of students (n=18)
            - Experiences of nurses with patients (n=1)
            Context (n= 3):
            - Not about clinical learning environment (n= 3)
  - Number of studies before critical appraisal
    N = 6
    - Critical appraisal:
      - Low quality ≤ 5 (n=1)
  - Number of studies included for the review
    N = 5